CSBits and Bytes

Highlighting **Innovative** Computer Science Research
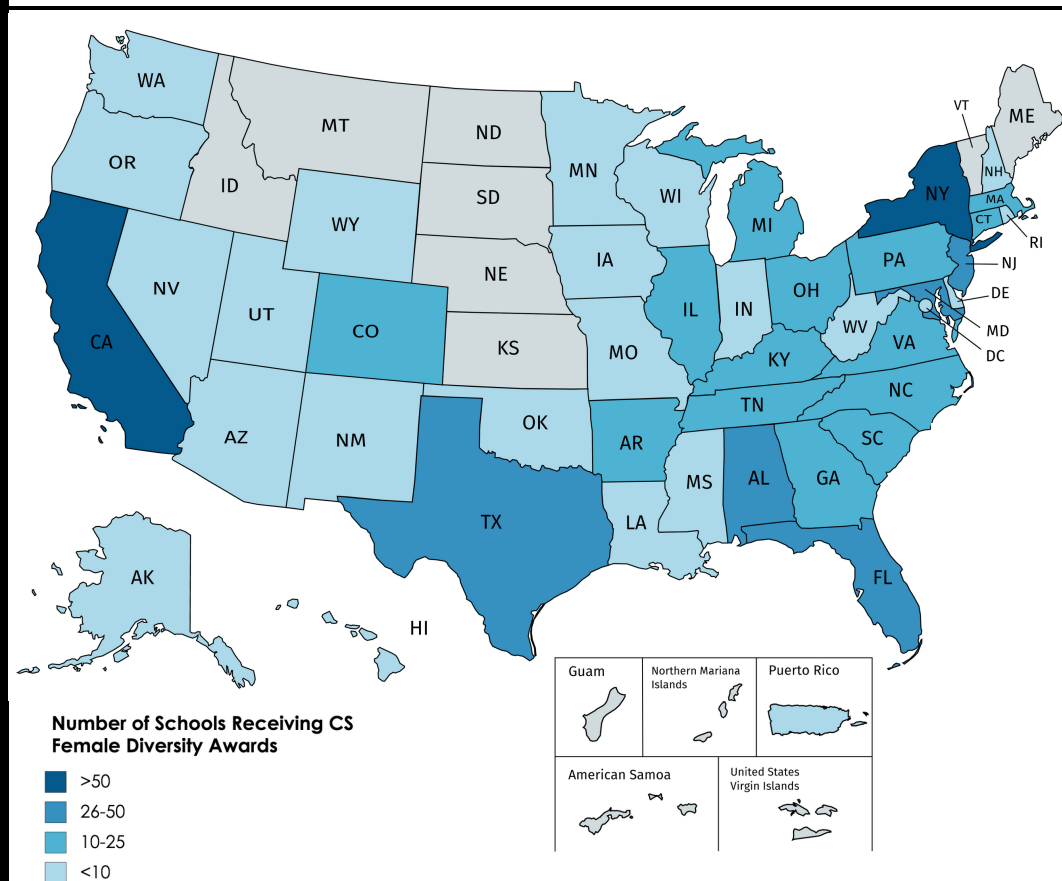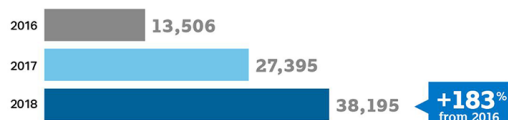*Special Edition: Outstanding CS Teachers!*

THANK YOU, CS TEACHERS!

In this special edition of *CS Bits and Bytes*, we want to thank computer science (CS) teachers across the Nation! Many are using Advanced Placement (AP) **Computer Science Principles (CSP)** to bring engaging, inclusive CS to the classroom! And it's working. Here's a look into who's taking the course and also who's teaching it!

Creative
Thinkers
Wanted

FEMALES TAKING THE AP-CSP EXAM:

Year	Count
2016	13,506
2017	27,395
2018	38,195

+183% from 2016

Number of Schools Receiving CS Female Diversity Awards

- >50
- 26-50
- 10-25
- <10

Guam | Northern Mariana Islands | Puerto Rico
American Samoa | United States Virgin Islands

CLOSING THE GENDER GAP

Record numbers of students are taking AP-CSP! When it launched in 2016, AP-CPS was the largest course launch in the College Board's 60-year history. Just three years later, the number of female students taking the AP-CPS exam increased **183 percent.** To recognize schools working to close the gender gap in CS courses, the College Board recognized all schools that reached either 50% or higher female representation in AP CS courses, or a percentage that equaled or exceeded that of the school's female population. The **AP Computer Science Female Diversity Awards** were provided to nearly 700 of the 18,000 schools that offered AP CS courses in 2018 (see map to left).

◀ SPOTLIGHT: ANNE PESQUIE

Ann Pesquie worked as a software engineer for many years and volunteered as a Microsoft Philanthropies **TEALS** (Technology Education and Literacy in Schools) instructor in the Bay Area before she became a high school teacher. She teaches Computer Science A (CSA) and AP-CSP at Balboa High School. Ms. Pesquie supplements her **MobileCSP** curriculum, which helps students develop ideas into applications, with real-life anecdotes. Her experience working in male-dominated environments has helped her to develop strategies to address the disparate gender breakdown in her classroom.

LEARN MORE:

TEALS

Mobile CSP

ACCESS FOR ALL

Many outstanding CS teachers are supporting ALL students in their classrooms. For example, the **AccessCSforAll** is a national effort to make CS inclusive of the approximately 7.5 million K-12 students with disabilities. One way is by using the **Quorum programming language**, which is a text-based language designed especially for users who are blind or visually impaired.

LEARN MORE: Quorum

For more resources on accessibility, check out:

AccessCSForAll

Access Computing

SPOTLIGHT: KO INAMURA

Ko Inamura is a special education and CS teacher for Lincoln Public Schools in Nebraska. While **Quorum** helped him address accessibility issues for his students who are blind or visually impaired, he also created inclusive lessons to keep students engaged in challenging coding tasks. Some of his students are completely blind, so he teaches his students to create programs that compose music, program robots, or create audio descriptive graphics games so everyone can enjoy.

TEACHER TESTIMONIALS

Click on the images below to hear how these outstanding CS teachers created engaging and inclusive CS classrooms!

Gianna Lopez Colson
La Feria ISD, TX

Lisa Carpenter Richardson
Clear Creek ISD, TX

Jill Westerlund
Hoover High School, AL

Taghrid Elmeligui
McMinnvile High School, OR

▼ TRY IT OUT!

Looking for more resources?
Check out these online communities for lessons, ideas, and activities.

CS for ALL TEACHERS

CSTA

CS UNPLUGGED